

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

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Date of mailing (day/month/year) **29. 6. 2004**

Applicant's or agent's file reference
R03343PCT

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/JP2004/004047

International filing date (day/month/year)
24. 03. 2004

Priority date (day/month/year)
28. 03. 2003

International Patent Classification (IPC) or both national classification and IPC
Int.Cl. **H04N1/41, H04N7/30**

Applicant
RICOH COMPANY, LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Japan Patent Office

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Box No. I

Basis of the opinion

JC05 Rec'd PCT/PTO 22 SEP 2005

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. II Priority

1. ☐ The following document has not yet been furnished:

☐ copy of the earlier application whose priority has been claimed (Rules 43bis.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rules 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☒ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

The earlier application whose priority has been claimed relates to the truncation data items are configured as "the data sequence number increases, the number of removed code data (i.e., code amount) increases and the quality of a reproduced image degrades in an increasing degree" or "the data sequence number increases, the removed code amount decreases and the quality of a reproduced image improves in an increasing degree" which technical features to provide "an advantage in that there is no need to decode the codes after truncation according to the JPEG2000 standard for comparison with an image prior to the truncation and to identify proper truncation that minimizes distortion."

The subject matter of claims of the international application relate only to either "the amount of code data removal" or "the quality of a reproduced image" which cannot provide any above-mentioned advantage by themselves.

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Box No. III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☐ claims Nos. _____

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (indicate particular elements below) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

☒ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. _____

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the
Administrative Instructions in that:

the written form

☐

has not been furnished

☐

does not comply with the standard

the computer readable form

☐

has not been furnished

☐

does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing do not comply with the technical requirements
provided for in Annex C-bis of the Administrative Instructions in that the computer readable form:

☐

has not been furnished

☐

does not comply with the technical requirements

☒ See Supplemental Box for further details.

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Box No. IV Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:

- ☒ paid additional fees
☐ paid additional fees under protest
☐ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

- ☐ complied with
☒ not complied with for the following reasons:

The special technical feature of claim 1-9 relates to "a truncation data item specifies a way in which code data is removed from the generated code data, such that the larger the data sequence number, the larger an amount of code data removal, or such that the larger the data sequence number, the smaller the amount of code data removal" while the special technical feature of claim 10 relates to "a truncation data item specifies a way in which code data is removed from the generated code data, such that the larger the data sequence number, the higher a quality of a reproduced image obtained by decoding the generated code data after the removal of code data, or such that the larger the data sequence number, the lower the quality of the reproduced image."

There is no technical relationship among those inventions involving one or more of the same or corresponding technical features to provide "an advantage in that there is no need to decode the codes after truncation according to the JPEG2000 standard for comparison with an image prior to the truncation and to identify proper truncation that minimizes distortion." Therefore, these groups of inventions are not so linked as to form a single general inventive concept.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

- ☒ all parts.
☐ the parts relating to claims Nos. _____

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations, and explanations supporting such statement

1. Statement

Novelty (N)	Claims		YES
	Claims	1 - 10	NO
Inventive step (IS)	Claims		YES
	Claims	1 - 10	NO
Industrial applicability (IA)	Claims	1 - 10	YES
	Claims		NO

2. Citations and explanations

D1: US 2003/0081847 A1(Yutaka Sato) 2003.05.01 & JP 2003-101787 A(Ricoh Company, Ltd.)Fig 8 Column [0059] Claim 1,4

D2: EP 1 158 774 A2(Eastman Kodak Company)2001.11.28 & JP 2002-64710 A Claim1

D3: EP 1 158 773 A2(Eastman Kodak Company) 2001.11.28 & JP 2002-57903 A Claim1

D4: JP 2004-56605 A(Nihon Hoso Kyokai) 2004.02.19 Family: NONE Claim1

D5: JP 2003-324612 A(Ricoh Company, Ltd.) 2003.11.14 Family: NONE Claim1

D6: JP 8-204970 A(Fuji Xerox Co Ltd) 1996.08.09 Family: NONE Column [0033]

The subject matter of claim 1-9 does not meet the requirement of novelty.
D1 discloses an apparatus for compressing an image comprising:
a memory unit which stores truncation data items identified by respective data sequence numbers, wherein a truncation data item specifies a way, such that the larger the data sequence number the smaller the amount of code data removal.
The priority claim has been found invalid.

The subject matter of claim 10 does not meet the requirement of novelty.
D2 and D3 disclose an apparatus for compressing an image comprising:
truncate data referring the quality table of the reproduced image.

D4 discloses an apparatus for compressing an image comprising:
truncate data referring the quality of the reproduced image and the amount of code data removal table.

D5 discloses an apparatus for compressing an image comprising:
truncate data referring the quality parameter of the reproduced image.

D6 discloses an apparatus for compressing an image comprising:
a memory unit which stores quantization data items identified by respective data sequence numbers, wherein a quantization item specifies a way, such that the larger the data sequence number the smaller the amount of data removal.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The description relates to the truncation data items are configured as "the data sequence number increases, the number of removed code data (i.e., code amount) increases and the quality of a reproduced image degrades in an increasing degree" or "the data sequence number increases, the removed code amount decreases and the quality of a reproduced image improves in an increasing degree" which technical features to provide "an advantage in that there is no need to decode the codes after truncation according to the JPEG2000 standard for comparison with an image prior to the truncation and to identify proper truncation that minimizes distortion."

The subject matter of claim 1-10 relate only to either "the amount of code data removal" or "the quality of a reproduced image" which cannot provide any above-mentioned advantage by themselves and are not identified how work by themselves.